

REMARKS

This application has been carefully reviewed in light of the Office Action dated April 10, 2007. Claims 1 to 16 are pending in the application, of which Claims 1, 7, 8, 9, 10, 13 and 15 are independent. Reconsideration and further examination are respectfully requested.

Claim 1 was rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,169,678 (Kondo '678); Claims 1 to 5 were rejected under 35 U.S.C. § 102(b) over U.S. Patent Publication No. 2002/0038667 (Kondo '667); Claims 1 and 6 were rejected under 35 U.S.C. § 102(b) over U.S. Patent Publication No. 2001/0032664 (Takehara); Claims 10 and 12 were rejected under 35 U.S.C. § 102(b) over U.S. Patent Publication No. 2002/0179140 (Toyomura); Claims 7, 8 and 9 were rejected under 35 U.S.C. § 102(e) over U.S. Patent Publication No. 2002/0195136 (Takabayashi); Claims 13 to 16 were rejected under 35 U.S.C. § 102(e) over U.S. Patent Publication No. 2003/0193322 (Higashikozono); and Claim 11 was rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103(a) over Toyomura in view of Kondo'667. The rejections are respectfully traversed.

Regarding the rejections of independent Claims 13 and 15 under 35 U.S.C. § 102(e) over Higashikozono, the rejections are respectfully traversed, since Higashikozono is not prior art by virtue of the earlier filing date of Japanese priority application 2002-361986 from which the subject application claims priority under 35 U.S.C. § 119.

In accordance with MPEP § 201.15, submitted herewith is a sworn translation of priority application Japan 2002-361986, filed December 13, 2002. In

keeping with the procedure under MPEP § 201.15, the Examiner should confirm that Applicant is entitled to the priority date for the claimed subject matter. Once the priority date is confirmed, Applicant respectfully requests the Examiner remove Higashikozono as a reference against the pending claims.

Referring specifically to the language of the claims, independent Claim 1 defines a solar cell module comprising at least one power conversion unit having a plurality of solar cell elements and a power converter provided in a position corresponding to a region surrounded by all the solar cell elements.

The applied references are not seen to disclose or to suggest the features of independent Claim 1, and in particular, are not seen to disclose or to suggest at least the feature of a power converter provided in a position corresponding to a region surrounded by a plurality of solar cell elements.

In entering the rejection of Claim 1 over Kondo '678, the Office Action asserts that Kondo '678 discloses "a power converter (21) provided in a position corresponding to a region surrounded by all the solar cell elements (11, 12, 13) (col.5; lines: 61-67 & col.6; lines: 1-5)." (Office Action, page 2). Applicant respectfully disagrees.

Contrary to the Office Action's assertion, Kondo '678 is seen to disclose merely that solar battery arrays 11, 12 and 13 are connected to power converters 21, 22 and 23. Such disclosure, without more, is not seen to disclose or to suggest a power converter provided in a position corresponding to a region surrounded by a plurality of solar cell elements.

In entering the rejection of Claim 1 over Kondo '667, the Office Action asserts "Kondo et al. (US 2002/0038677) discloses the solar cell module (1) (paragraph 1) according to claim 1." (Office Action, page 2). Applicant respectfully disagrees. While Kondo '667 may disclose a solar battery module comprising a solar battery and an electronic power converter (see, paragraph [0001] of Kondo '667), Kondo '667 is not seen to disclose or to suggest a power converter provided in a position corresponding to a region surrounded by a plurality of solar cell elements.

In entering the rejection of Claim 1 over Takehara, the Office Action points to Takehara's solar cell panel 101 in Figure 1, and further to paragraph [0132] of Takehara. However, Figure 1 of Takehara is seen to depict merely that solar cell panels 101 can be arranged on the roof of a house, and paragraph [0132] and corresponding Figure 12 are seen to disclose a way to connect solar cell modules. Applicant fails to see how this disclosure of Takehara discloses or suggests a power converter provided in a position corresponding to a region surrounded by a plurality of solar cell elements.

The remaining applied references, namely Toyomura, Takabayashi, and Higashikozono, are not seen to cure the deficiencies of Kondo '678, Kondo '667, and Takehara, either alone or in any permissible combination. Accordingly, independent Claim 1 is believed to be allowable.

Independent Claims 7, 8 and 9 define a solar cell module comprising at least one power conversion unit having a plurality of solar cell elements arranged on a plane and a power converter, wherein (A) the power converter is arranged in a position of minimizing a sum of all collecting losses when collecting a power generated by the solar cell elements to the power converter (Claim 7), (B) the solar cell elements respectively have a terminal

member and the power converter is arranged in the closest position between the terminal members in a state of arranging the solar cell elements (Claim 8), or (C) the solar cell elements respectively have a terminal member and the power converter is arranged in the closest position between the terminal members in a state of arranging the solar cell elements and in a position of minimizing a sum of all collecting losses when collecting the power generated by the solar cell elements (Claim 9).

In entering the rejections of Claims 7, 8 and 9, the Office Action relies on Figure 13 of Takabayashi. Specifically, regarding Claim 7 the Office Action asserts “Claim 7 reads on the power converter (1303) of Takabayashi et al., which achieves a position as shown in Figure 13 of minimizing a sum of all collecting losses by being the closest to the position of the solar cell array (1303)”. (Office Action, page 5)(emphasis added). Regarding the rejection of Claim 9, the Office Action similarly relies on alleged disclosure of position in Figure 13. (Id.) Regarding Claim 8, the Office Action asserts “the power converter (1303) [depicted in Figure 13] is arranged in the closest position between the terminal members (1104 & 1105)”. (Id.)(emphasis added)

However, Figure 13 of Takabayashi is a simple block diagram, and Applicant submits that Figure 13 cannot reasonably be relied on for any depiction of structural/positional arrangement. (See, e.g., MPEP § 2125 (“the picture must show all the claimed structural features and how they are put together. . . . The drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art. . . . When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value.”)(emphasis added)). Accordingly, Applicant contends that the Office Action’s

reliance on Figure 13 of Takabayashi is misplaced, and the rejections of Claims 7, 8 and 9 are traversed for at least this reason.

The remaining references are not seen to cure the deficiencies of Takabayashi, either alone or in any permissible combination. Accordingly, independent Claims 7, 8 and 9 are believed to be allowable.

Independent Claim 10 defines a solar cell module comprising at least one power conversion unit having two adjacent solar cell elements and a power converter provided in a position corresponding to a region on the extension of a gap between the two adjacent solar cell elements.

In entering the rejection of Claim 10, the Office Action asserts that Figure 8 of Toyomura discloses “two adjacent solar cell elements/ modules (5110) and a power converter (5107) provided in a position corresponding to a region(refer to figure 8) on the extension of a gap (paragraph 7) between the two adjacent solar cell elements.” (Office Action, page 4). Applicant respectfully disagrees for at least the reason that, while Toyomura’s Figure 8 may disclose gaps between two adjacent solar cell modules 5110, Figure 8 is not seen to disclose or to suggest that power converter 5107 is provided in a position corresponding to a region on the extension of one of the gaps. For at least this reason, Toyomura is not seen to disclose or to suggest a power converter provided in a position corresponding to a region on the extension of a gap between the two adjacent solar cell elements.

The remaining applied references, either alone or in any permissible combination, are not seen to cure the deficiencies of Toyomura. Accordingly, independent Claim 10 is believed to be allowable.

The other claims in the application are each dependent from the independent claims and are believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

Turning to the rejection of Claim 11, Applicant contends that the Office Action's rejection of Claim 11 over Toyomura under 35 U.S.C. § 102(b) is improper, since the Office Action concedes that Toyomura "fails to disclose at least two power conversion units electrically connected to a power converter." (Office Action, page 7). Applicant respectfully requests clarification of the rejection of Claim 11 under § 102(b), or withdrawal of the rejection on those grounds.

Turning to a formal matter, Applicant notes that, although Kondo '678 is cited in the Office Action, the Office Action does not list Kondo '678 on the attached Form PTO-892. Applicant respectfully requests that the Examiner list Kondo '678 on a Form PTO-892 and forward such form to Applicant at the Examiner's earliest convenience.

No other matters being raised, it is believed that the entire application is in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa, CA office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

/Gregory S. Weaver/
Attorney for Applicant
Registration No.: 53,751

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3800
Facsimile: (212) 218-2200

FCIS_WS 1438217v1